

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the present application.

Listing of the Claims:

Claims 1-8 (Canceled).

9. (Currently Amended) ~~[[A]]~~ An airbag control unit for a vehicle, comprising:
an internal ground;
an integrated circuit, wherein at least one component of the integrated circuit is
connected to the internal ground;
a converter having an electrical isolation from a main electrical system of the vehicle,
wherein the converter is configured for supplying an electrically isolated supply voltage and
an electrically isolated internal ground to the at least one component of the integrated circuit,
and wherein the converter is connected to the internal ground to provide electrical isolation of
the internal ground from the main electrical system of the vehicle; and
at least one coupling element having an electrical isolation from the main electrical
system, wherein the coupling element is configured to be connected to the integrated circuit
and to transmit data to the integrated circuit solely within the airbag control unit.
10. (Previously Presented) The control unit as recited in claim 9, wherein the converter includes a transformer for electrical isolation, a DC/AC voltage converter being provided on a primary side, and a rectifier being provided on a secondary side.
11. (Previously Presented) The control unit as recited in claim 10, wherein the DC/AC voltage converter includes an oscillator.
12. (Previously Presented) The control unit as recited in claim 10, wherein the DC/AC voltage converter includes a chopper.

13. (Previously Presented) The control unit as recited in claim 9, wherein the at least one coupling element is an optocoupler.

14. (Previously Presented) The control unit as recited in claim 9, wherein the converter is connected to at least one energy store which runs the converter in case a power supply is disconnected.

15. (Previously Presented) The control unit as recited in claim 9, wherein the integrated circuit is an ignition circuit control for a restraint device.

16. (Previously Presented) The control unit as recited in claim 9, wherein the integrated circuit includes electronics of the control unit.

17. (Currently Amended) The control unit of claim 9, further comprising:
a second converter having input terminals configured to receive a vehicle battery voltage, and output terminals configured to provide a second supply voltage;
an electronics component configured to receive the second supply voltage; and
wherein the coupling element is configured to exchange data between the integrated circuit and the electronics component in a manner in which the integrated circuit remains electrically isolated ~~[[form]]~~ from the electronics component.

18. (Previously Presented) A vehicle control system having the control unit of claim 9, wherein the converter is configured to receive a vehicle battery voltage in response to a closing of an ignition lock switch, and is configured to generate the supply voltage based on the vehicle battery voltage.

19. (Currently Amended) ~~A vehicle~~ An airbag control unit, comprising:
an integrated circuit;
a first dc-to-dc converter having input terminals configured to receive a vehicle battery voltage and a vehicle ground, and output terminals configured to provide a first internal supply voltage and an internal ground to the integrated circuit, wherein the output

terminals are electrically isolated from any vehicle components carrying the vehicle battery voltage and any components carrying the vehicle ground;

a second dc-to-dc converter having input terminals configured to receive the vehicle battery voltage, and output terminals configured to provide a second internal supply voltage;

an electronics component configured to receive the second internal supply voltage;
and

a coupling element configured to exchange data solely within the control unit, wherein the coupling element exchanges data between the integrated circuit and the electronics component in a manner in which the integrated circuit remains electrically isolated [[form]] the electronics component.

20. (Currently Amended) A vehicle control system having the ~~vehicle~~ control unit of claim 19, wherein the first dc-to-dc converter is configured to receive the vehicle battery voltage in response to a closing of an ignition lock switch, and to generate the first internal supply voltage based on the vehicle battery voltage.

21. (Currently Amended) A vehicle airbag control system, comprising:

an integrated circuit;

a dc-to-dc converter having input terminals configured to receive a vehicle battery voltage and a vehicle ground, and output terminals configured to provide a first internal supply voltage and an internal ground to the integrated circuit, wherein the output terminals are electrically isolated from any vehicle components carrying the vehicle battery voltage and any components carrying the vehicle ground,

wherein the dc-to-dc converter is configured to receive the vehicle battery voltage in response to a closing of an ignition lock switch; and

a coupling element configured to transmit data to the integrated circuit in a manner in which the integrated circuit remains electrically isolated from a component at another end of the data transmission, wherein the coupling element exchanges data solely within the airbag control system.

22. (Currently Amended) The vehicle airbag control system of claim 21, further comprising:

a second dc-to-dc converter having input terminals configured to receive the vehicle battery voltage, and output terminals configured to provide a second internal supply voltage;
an electronics component configured to receive the second internal supply voltage;
and

wherein the [[a]] coupling element is configured to exchange data between the integrated circuit and the electronics component in a manner in which the integrated circuit remains electrically isolated [[form]] from the electronics component.